City of New Orleans Resilience Design Review Committee

- Thank you for joining us and continuing to stay Safer at Home in Phase II. Welcome to the WebEx presentation of the Resilience Design Review Committee.
- Please keep your computer and/or phone on mute while the presentation is ongoing.
- Each presentation and discussion of the Committee Members will be approximately 30 minutes. Public comment will be requested at the end of the meeting. There are two ways to ask questions:
 - Use the chat feature to chat us a question at any point during the presentation. We will go through all questions during the discussion at the end.
 - You can also use this number to text questions to the team: (504)-941-0594. These questions will be read aloud by the moderator at the end of the meeting.

AGENDA

- Presentation St. Bernard Neighborhood Campus
- Public Comment



City of New Orleans Resilience Design Review Committee

St. Bernard Neighborhood Campus

4:00 p.m., 8/3/20

Resilience Design Review Committee

- Created by City Policy Memo 133R to ensure consistency with the Resilience Strategy - https://nola.gov/resilience-sustainability/
- Members of the Committee
 - Chief Resilience Officer
 - Office of Equity
 - Hazard Mitigation Administrator
 - Parks and Parkways
 - Public Works
 - Planning Commission
- Reviews projects across these categories
 - Location, character, and extent
 - Embodiment of resilience values
 - Equity impacts and outcomes
 - Creative community involvement and engagement
 - Best maintenance design for resilience performance criteria

St. Bernard Neighborhood Campus

90% Resilience Design Review Committee Meeting

September 3, 2020

4:00 – 5:00 pm





IntroductionsProject Team on the Call



Stephanie Dreher City of New Orleans



Natalie Manning City of New Orleans



Tom Cancienne Stantec



Julia Drapkin IseeChange



Brook Morris Procella Design







Agenda

- 1. Background
- 2. Project Goals
- 3. Public Engagement
- 4. Project Update
- 5. Schedule
- 6. Questions







Background

Urban Stormwater Planning & the Gentilly Resilience District

- Urban Water Plan (2013)
- FEMA funded Hazard Mitigation Program Grant (HMGP) combination gray and green infrastructure projects
- Combining the City's Joint Infrastructure Recovery Request (JIRR) Capital Improvement Program funds
- \$141M US Department of Housing and Urban Development (HUD) National Disaster Resilience (NDR) grant funding for the Gentilly Resilience District projects and programs







Background Existing Conditions

- Pumping and low infiltration has led to high subsidence rates
- Entire neighborhood drains to Drainage Pump Station (DPS) #3
- Frequent flooding

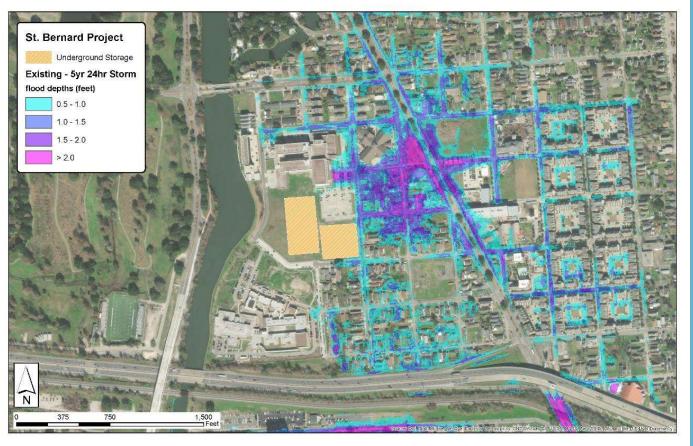






Background

Flooding (5-year Storm)







Background

Early Visions



St. Bernard Neighborhood Project Scoping Area



St. Bernard Neighborhood Street Conceptual Rendering



St. Bernard Neighborhood Conceptual Rendering





Project Goals



Urban Water

- 1. Flooding reduction
- Promote infiltration and groundwater recharge



Recreation

- 1. Access to parks
- 2. Active and passive recreation



Ecology

- 1. Increase biodiversity
- 2. Integrate more climate-thriving plantings



Public Health

 Encourage community wellness by increasing spaces for outdoor activity



Infrastructure

 Create complete street corridors



Economics

- Drive economic growth through reinvestment
- 2. Reduce flood management risk



Urban Heat Mitigation

- Increase shaded spaces
- 2. Increase
 monitoring in an
 effort to reduce
 heat island effect



Community

- 1. Create spaces for social gatherings
- 2. Interactive educational opportunities

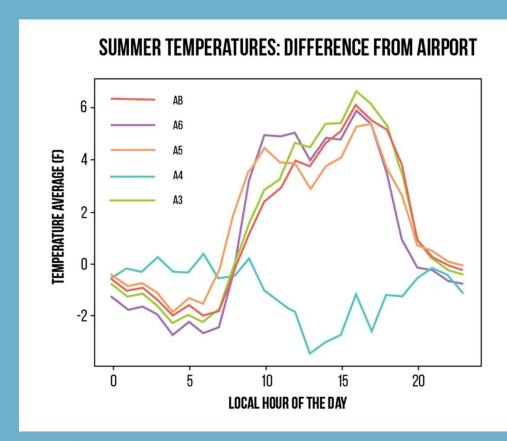


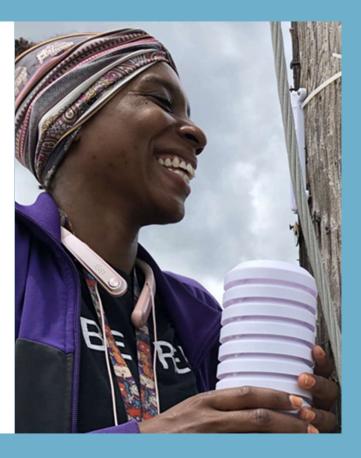


Project Goals

ISeeChange Heat Sensors in St. Bernard Campus, Summer 2019











Businesses

- Columbia Parc at the Bayou District
- Educare New Orleans
- Good Samaritan Rehab & Nursing Center
- Hair Grounds Gentlemen's Grooming
- Spider's Meat Market
- St. Thomas Community Health Center
- Super Suds

Residential

- Parkview St. John Apartments
- Apartments from Senate to Harrison
- Single family residential bounded by Harrison, St. Bernard, Sere and Encampment
- Columbia Park

Community outlets

- Norman Meyer Library
- Gentilly Messenger









Door to Door outreach

Planning Workshop

7/11/18

Dillard Health and

Community Resource Fair

Gentilly Fest

Visioning Workshop

10/13/18

Visioning Workshop

11/15/18

60% Design Community Update

90% Community Update

8/20/20



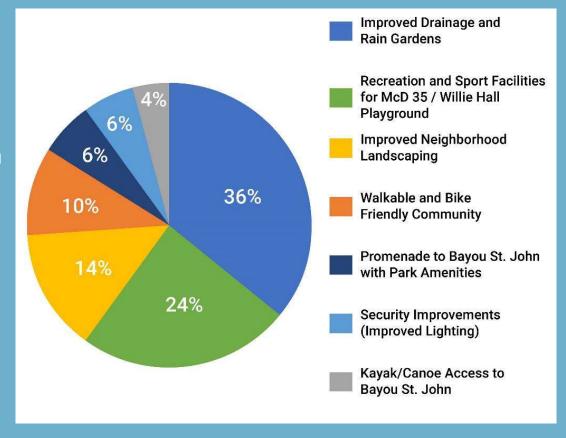






What We Heard

- 1. Improve Drainage
- 2. Recreational Amenities / Facilities
- 3. Improve Neighborhood Landscaping
- 4. Provide Walkable & Bike Friendly Area
- 5. Provide Park Amenities
- 6. Security Improvements
- 7. Kayak/Canoe Access to Bayou St. John







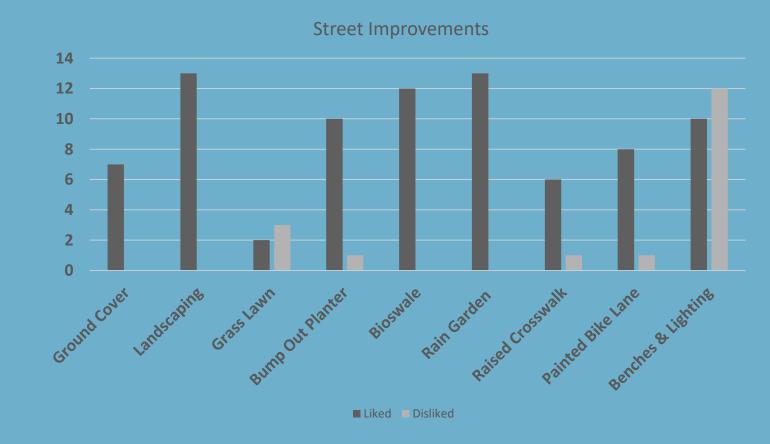
What We Heard

Liked

- 1. Playground
- 2. Exercise Station
- 3. Green Area
- 4. Boardwalk
- 5. Shade Structure

Disliked

- 1. Benches
- 2. Public Fountain
- 3. Dog Park
- 4. Picnic Area
- 5. Event Lawn

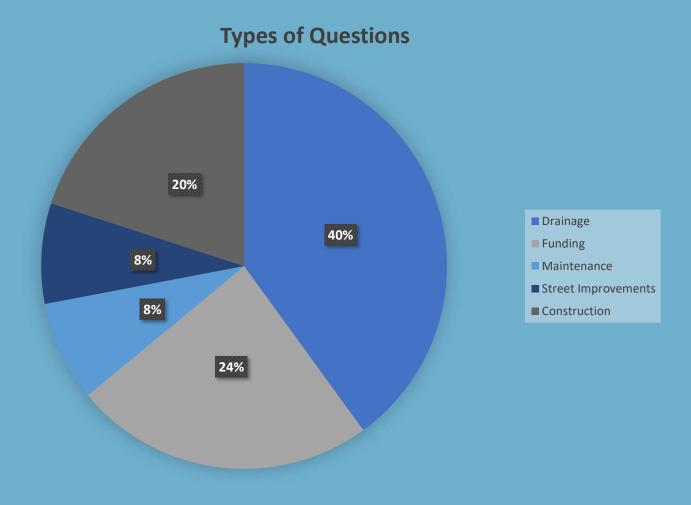






What We Heard

90% Community Meeting Aug 20, 2020







Project Phasing

Phase I:

Stormwater Storage Willie Hall Playground

Phase II:

Multi-Purpose Recreation Support Building

Phase III:

Gray & Green Infrastructure Improvements Park / Recreational Amenities

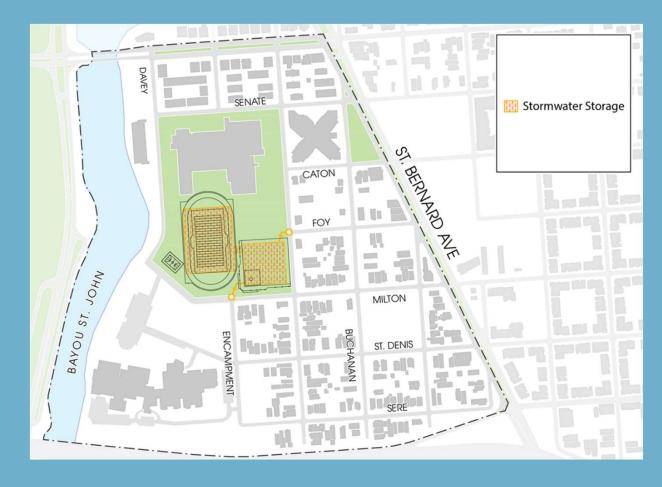




Willie Hall Playground and Multi-Functional Athletic Fields

Elements:

- Sub-SurfaceStormwater Storage
- High Grade Athletic Fields







Underground Stormwater Storage





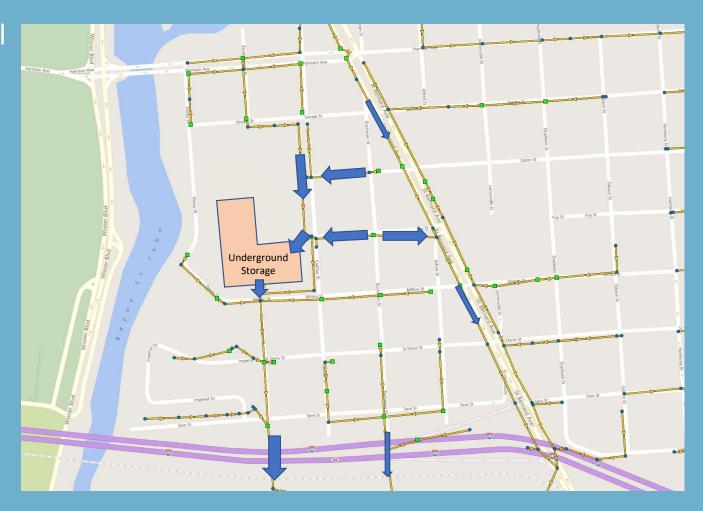


SWMM Model

Flow Direction

Underground Storage

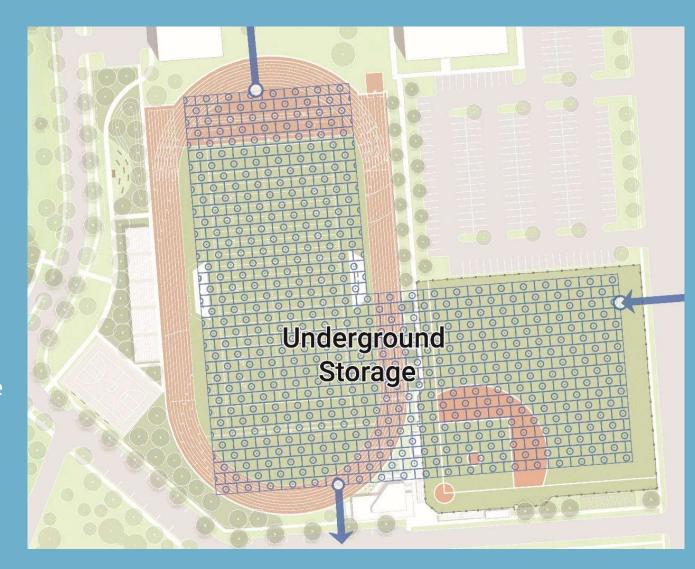
- Drainage Pipe





Underground Stormwater Storage

- 4.2 Acres of underground stormwater detention basin
- Will store up to 5 million gallons of stormwater = 7.5 Olympic-size pools
- Largest underground storage chamber system in the region









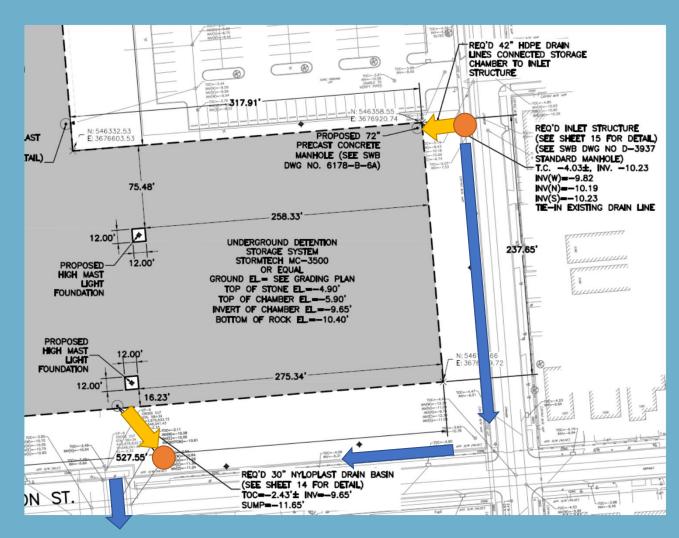
Stanted

Underground Stormwater

2 New Drainage Manhole Tie-ins

Existing 58x36 RCPA to Remain

Minimal Impact to Existing Drainage



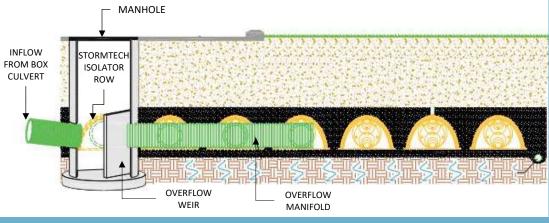
StormTech Chambers – Maintenance

- Isolator Row designed to capture "first flush" sediments and debris.
- Flow rates exceed Isolator row capacity the water will flow over the weir and discharge through manifold to chambers.
- Effective means to minimize maintenance requirements and costs.

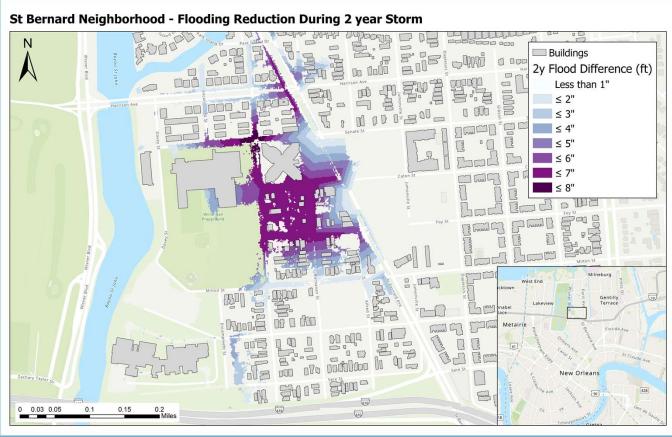








Flood Reduction Benefits



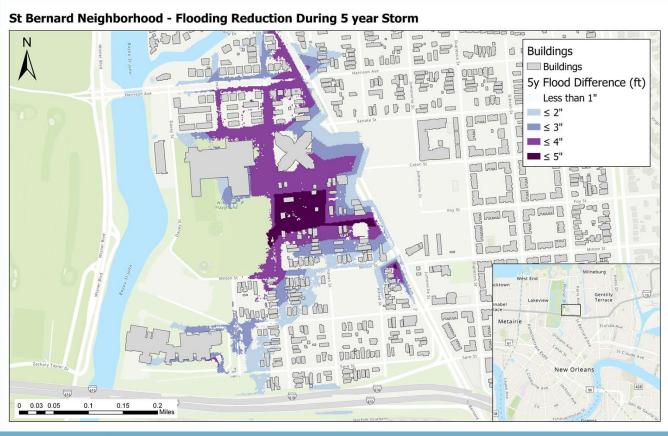
2-Year Storm Flood Reduction

Flood Duration Reduction 2 hrs





Flood Reduction Benefits



5-Year Storm Flood Reduction

Flood Duration Reduction 1.75 hrs





Willie Hall Playground A Community Institution







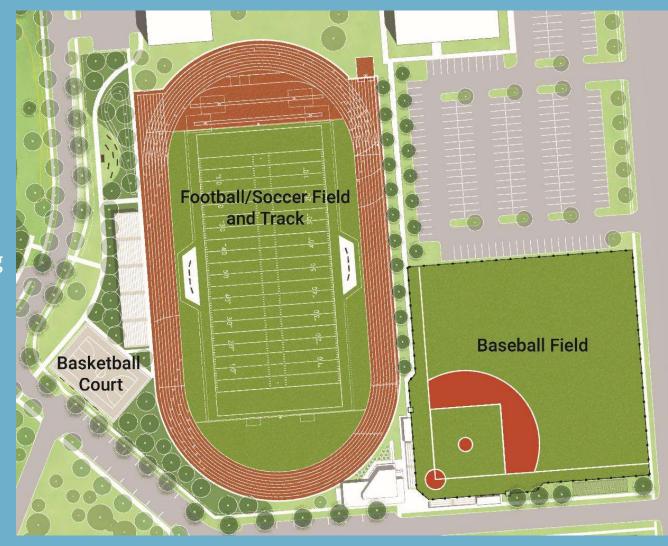




Willie Hall Playground

Athletic Fields

- Football/Soccer Field
- Baseball/Softball Field
- Basketball Court
- Sports and Area Lighting
- Bleachers







Phase I Landscaping







Project Benefit Cost Analysis

Greatest Benefits

- Property Value Increase
- Flood Damage Reduction
- Subsidence Reduction
- Stormwater Treatment

Costs

- Capital Expenditures
- Operations and Maintenance
- Replacement Costs

Triple Bottom Line (in NPV) = \$4.8M Benefit Cost Ratio = 1.4

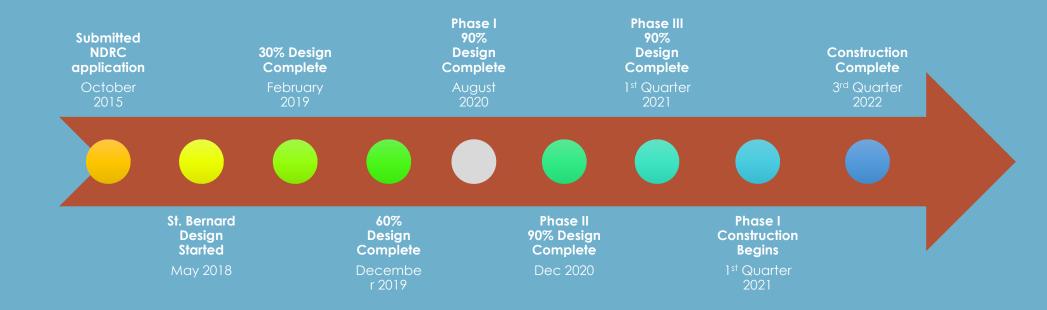




Impact Type	Cost/Benefit	Expected Value
Financial	Capital Expenditures	-\$7,478,000
Financial	Operations and Maintenance	-\$3,033,000
Financial	Replacement Costs	-\$1,477,000
Financial	Residual Value of Assets	\$3,000
Social	Subsidence Road Impact	\$2,357,000
Social	Subsidence Property Impact	\$464,000
Social	Public Health	\$71,000
Social	Public Health CVD Impact	\$21,000
Social	Property Value	\$931,000
Social	Flood Damage	\$8,935,000
Social	Recreational Value	\$1,078,000
Social	Education	\$105,000
Social	Heat Island Effect	\$32,000
Environmental	Carbon Emission Sequestration	\$4,000
Environmental	Air Pollution Sequestration	\$13,000
Environmental	Stormwater Treatment	\$2,760,000

	Expected Value
Financial	-\$11,985,000
Social	\$13,994,000
Environmental	\$2,777,000
Triple Bottom Line NPV	\$4,786,000

Schedule



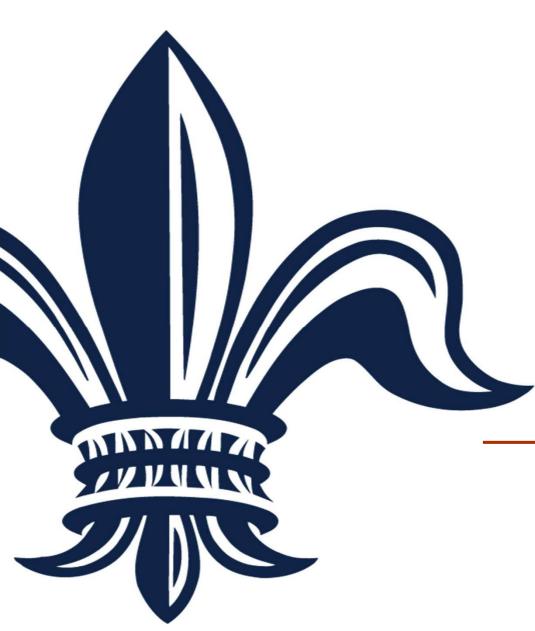






Committee Discussion





Stay in Touch!

Visit the project website for more info: https://www.nola.gov/resilience-sustainability/ndr-grd-projects-programs/st-bernard-neighborhood-campus/

Email <u>roadwork@nola.gov</u> to sign up for project updates

Follow us on social media @ResilientNola

Contact Natalie Manning, RoadworkNOLA Outreach Specialist, at 504.658.7623